A COMPARATIVE STUDY OF TECHNOSTRESS IN PUBLIC SECTOR AND PRIVATE SECTOR BANKS IN INDIA (WITH SPECIAL REFERENCE TO AGRA CITY)

A

SYNOPSIS

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Under the Supervision of:

Prof. Shalini Dubey

Dept. of Applied Business Economics

Submitted By:

Shweta Jain

Research Scholar

Co- Supervisor:

Dr. Anisha Satsangi

Dept. of Applied Business Economics

DAYALBAGH EDUCATIONAL INSTITUTE
(DEEMED UNIVERSITY)
DAYALBAGH, AGRA-282005
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INTRODUCTION

A bank is a financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the form of deposits and it lends money to those who need it. Banking sector is considered as a hub and barometer of the financial system. As a pillar of the economy, this sector plays a predominant role in the economic development of the country. Over the last ten years the banking industry has gone through some sweeping changes. Transformation, Consolidation, Outsourcing are just some of the most prominent buzzwords that are used to describe major trends afflicting the banking industry. Moreover, expanding business activities of the private banks, re-entry of foreign banks, strict regulatory and disclosure requirements and increased minimum paid up capital requirements, modernization of Core Banking Systems, increased automation and up gradation of IT and development of new products shall have a significant impact on the banks employees. Workload beyond ones capacity, ambiguity in defining duties & responsibilities, lack of support from superiors, lack of authority to control resources, absence of autonomy in taking decisions, work life imbalance etc. are some of the sources of stress in organizations which in turn affect the mental and physical wellbeing of employees.

Technology adoption is widespread in banking industry and it is prevalent in each and every function of the banks. Technology has become an integral part of banking transactions. However, the present usage of technology also leads to anxiety, stress and work life imbalance among bank employees. Technology advancements have increased the stress levels among bank employees.

Technostress is an offspring of stress. Anxiety and tension are perceived phenomenon with stress with resultant emotional and psychological reactions. However, work-related stress ensues once there is a mismatch between the job demands and resources and capabilities of the worker to meet the demands (Blaug, Kenyon, &Lekhi, 2007)[3].Organizations has to face **"techno stress"** as a challenge inherent in the use of technology facilities in their activities. This

term is a modern disease of adaptation caused by an inability to cope with the new technologies in a healthy manner.

Technology advancements have not only added to the stress levels among bank employees but also provided with some new opportunities to the organizations. It is important to mention here that the manufacturing and service industry were the first to adopt technological advancements. Very basic technology was used earlier in the form of telex machines, telephones, typewriters, fax machines etc. In the present study, we will discuss the modern technology trends in banking sector and its impact on the stress created by its usage. Banking industry is totally transformed in recent times and the force behind this transformation is technology revolution. The application of organization automation has immensely improved the effectiveness of organizations' activities such as transaction, transfer, forex trading and transitions (Bichteler, 1986; Murthy and Cholin, 2003)[3].

Stress is the **"wear and tear"** of our bodies experience as we adjust to our continually changing environment; it has physical and emotional effects on us and can create positive or negative feelings. As positive influences, stress can help compel us to action; it can result in a new awareness and an exciting new perspective. As a negative influence it can result in feelings of destruct, rejection, anger and depression, which in turn can lead to health problem such as headache, upset stomach, rashes, insomnia, ulcers, high blood pressure, heart diseases and stroke.

For adopting and adjusting to the fast changing technological changes, employees require being multilingual, well versed with different cultures and policies, procedures of international levels. These demands put enormous pressure on employees which results into overload of work, multi-tasking, multi-skilling and extended working hours. Information technology has become like the lifeline of organizations and also necessity of every individual. So, it is turning out to be a necessary evil which cannot be avoided but it should be properly implemented so that it does not become a foe for the employees.

However, techno stress is the general feeling of anxiety and the negative impact on thoughts, behaviors, attitudes, and body when a person is expected to deal with technology (Kupersmith, 1992; Weil and Rosen, 1997)[3].

"Tarafdar, Tu, Ragu-Nathan, and Ragu-Nathan"[9] described technostress as a problem of adaptation and inability to cope with or to get used to Technology. They have identified five components of technostress, which are:

Techno-overload: Describes situations where use of technologies forces people to work more and work faster.

Techno-invasion: Describes being "always exposed", where people feel the need to be constantly connected irrespective of place and time.

Techno-complexity: Describes situations where the complex technologies force people to spend recourses in learning and understanding the use of new applications.

Techno-insecurity: Associated with situations where people feel insecure about their jobs with other people, who are better equipped with new tools and technologies.

Techno-uncertainty: A situation where technology (ICT) users feel uncertain and unsettled since technology is continuously changing and need upgrading. Continuous changes and upgrades restrain people to experience at a particular system.

Techno stress has various psychological as-well-as physiological impacts on human being. It includes decreased job satisfaction, organizational commitment and productivity.

REVIEW OF LITERATURE

Following studies are taken into consideration before going to conduct present research:

STUDIES OF INTERNATIONAL LEVEL

Qin Shu, QiangTu (2011)"The Impact of Computer Self-Efficacy and Technology Dependence on Computer-Related Technostress" This study developed a conceptual model in which computer-related technostress was studied as consequences of computer self-efficacy and technology dependence. Results show that (a) employees with higher level of computer self-efficacy have lower level of computer-related technostress, (b) employees with higher level

of technology dependence have higher level of computer-related technostress, and (c) employees under different individual situations may perceive different levels of technostress. Contributions of this research and implications for theory and managerial practice are also discussed.

Katherine Walz (2012) "Stress Related Issues Due to Too Much Technology: Effects on Working Professionals" The purpose of this study is to examine the relationship between technology and stress and to find out what the stress related issues are, to what extent does "technostress" affect our personal lives and overall to gain a better understanding of the consequences of too much technology use. Findings suggest "Technoinsecurity" (individuals who feel insecure in their level of understanding of information communication technologies) is not supported… the opposite of this condition was found, 73% agreed or strongly agreed they have adequate skills to understand the technology they are using. Thirty-eight percent of the respondents almost always feel anxiety when they do not have their cell phone on their person, and 58% always check their cell phone the instant they get an alert for an incoming text or email. Overall, results corroborate that the phenomenon known as "technostress" exists.

Asad Khan, Hamid Rehman(2013) "An Empirical Analysis of Correlation Between Technostress and Job Satisfaction: A Case of KPK, Pakistan" The objective of this research was to explore an association between technostress and job satisfaction of university librarians in Khyber Pakhtoonkhwa (KPK), Pakistan. Findings of this study show a negative but statistically significant relationship of three dimensions of technostress with job satisfaction. This study will be significant in controlling stress caused by technology and enhancing the level of job satisfaction among Pakistani university librarians. The study will equally contribute to the literature on relationship between technostress and job satisfaction.

Okebaraml, Sunday Moses(2013) "Minimizing the Effects of Technostress in Today's Organization" This study sought to determine the major causes, symptoms and effects of technostress and based on its findings, to suggest strategies for minimizing technostress in organization. To achieve this purpose, it pursued four specific objectives namely to determine

the extent to which technostress are perceive in organization, to ascertain the major causes and symptoms of technostress in organization, to determine the major effects of technostress in organization and to suggest strategies for minimizing the effects of technostress in organization. The result shows that the major effects of technostress in organization as decreased health and wellness, and implementing and maintaining technology in an organization can be difficult to minimize the effects of technostress in organization, the study recommended that work-life balance whereby employees achieving a satisfactory equilibrium between work and non-work activities (flexible working). Also the organization should make use of stress inoculation training (SIT) by adopting its three stage process of education, rehearsal and application.

Odoh, Ben Odigbo (2013) "Effect of Techno-Stress on the Performance of Accountants and Other Managers in Nigerian Banking and Brewery Industries" The objectives sought included to determine the effect of techno-stress on the performance and health of majority of middle-level and senior managers in the Nigerian banking and brewery sectors. Opinion survey techniques were employed in gathering data. Results indicate that techno-stress has not significantly affected the performance of majority of middle-level and senior managers negatively in the Nigerian banking and brewery sectors. It has not also significantly increased the rate of ill-health of majority of managers in the Nigerian banking and brewery industries.

Eziefule, Chinyere Adamma (2015) "Effects of Technostresson Organizational Performance of Commercial Banks in Southeast, Nigeria" The study is on effects of technostress on organizational performance in money deposit banks in SouthEast Nigeria. This study therefore sought to determine the influence of workoverload on productivity in workers in SouthEast Nigeria. The study concludes that technostress sufferers should be made to adapt freely to their environment by the management of the banking industry as this will enhance efficiency and effectiveness and in-turn will lead to productivity. The study recommends that management should introduce tools that are user-friendly as this will make work easier and more interesting; management should give remuneration packages to their staff as this will enable their staff to have access to good health; enabling environment should be created in the

banking industry as this will help their staff to adapt to their new found job as the overbearing effect of technology usage has been found to causetension, fatigue, bumoutstress, technooverloaad, technocomplexity, technophobia and technomania.

Nor Farah Hanis Binti Zainun (2015) "Work Stressors, Technostress and Employee Commitment to Change: The Moderating Effect of Internal Communication" The purpose of this study is to examine the relationship of work stressors (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) and technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) on employee commitment to change. Regression analysis results showed techno-invasion and techno-insecurity has significant and negative relationship with employee's normative commitment to change. The result also indicated internal communication as a moderator has a significant relationship between techno-uncertainty and employee's affective commitment to change. Finally, result also indicated internal communication as a moderator has a significant relationship between techno-uncertainty and employee's normative commitment to change.

Ayodeji Akinlolu Agboola, Omoneye Olufunke Olasanmi (2016)"Technological Stressors in Developing Countries" This paper highlights the impact of technological stress (technostress) in auditing firm in developing countries. It's analyzed that technological stressors can result in ergonomic hazards, which are detrimental to workers and their places of work due to effect productivity level. It could thus be suggested that improved ICT training and stress management interventions are important processes for enhancing individual and professional well-being in order to prevent technostress and ergonomic hazards.

Arif Akçay, Yusuf Levent Şahin (2016) "Determining the Reasons of Technostress Experienced by Teachers: A Qualitative Study" The purpose of this study is to determine the reasons leading to technostress experienced by teachers, who are the addressee of an intensive use of technology as a result of an integration process to which they are subjected in this study. For this purpose, qualitative data were collected from 64 teachers, who benefit from technology

intensively and themes were prepared using 117 different opinions after the content analysis. According to this, there are five main reasons indicating technostress experienced by teachers: individual problems, technical problems, education oriented problems, health problems and time problem. It was also seen in the study that the distribution of reasons leading to technostress experienced by teachers also differs in terms of gender.

STUDIES OF NATIONAL LEVEL

Ramakrishna Ayyagari (2007) "What and Why of Technostress: Technology Antecedents and Implications" The research model proposes that certain technology characteristics exacerbate stressors identified in occupational stress literature leading to the manifestation of stress, referred to as strain. The results suggest that technostress is prevalent (and a significant predictor of overall job strain). Specifically, work overload and role ambiguity are found to be the two most dominant stressors, whereas intrusive technology characteristics are found to be the dominant predictors of stressors.

Krishnan T.N. (2010) "Technological Change & Employment Relations in India" This article provides an overview of the consequences of technology change on employment relationship in India. The result shows that introduction of new technology has been mandated by the need to respond to competitive market conditions. Indian industry has in the last couple of decades been able to proactively respond to market demands and introduce significant changes.

Priyanka Das, Alok Kumar Srivastav (2013) "A Study on Stress among Employees of Public Sector Banks in Asansol, West Bengal" The purpose of this study was to determine factors of work stress among the Bank employees. This study aims to determine whether there were any statistically significant differences in the respondents' level of work stress by demographic factors (gender, age, education qualification, job pessimism, work experience, frequency of anger, difficulty to concentrate and sleeping etc.) The findings of this study showed that there was no statistically significant difference in the level of work stress by demographic factors (age, gender, status, education qualification, job pessimism). However,

the findings showed that only organizational factors have significant relationship with work stress level. Findings of this study also resulted in the overall level of work stress among respondent is moderate.

Bharathy A. (2015) "Mediation of Techno Stress: The Need for Strategic Change Agents in BPO/ ITES Organisations" The purpose of this research is to examine the stressors among the BPO employees in Chennai and Pondicherry, and to suggest mediations to improve the internal and external environment of these employees so that their perceived level of occupational stress is minimized to the maximum extent possible. The result shows that the stress in the BPO/ITES industry is found to be at moderate levels as understood from the study. Though the revelations of the study are in line with the opinion that BPO/ITES workplaces are organized in ways that weaken employee potential and enhance the potential for management control, and loss of control is generally understood to be an important indicator of work related stress and we can call this as techno stress as it is induced more by the nature of the technology involved in the job.

Dhiraj Sharma, Tavleen Kaur Gill (2015) "Is Technology Stressful? (A Study of Indian Public Sector Banks)" the objective of this study is to understand the technological antecedents which induce stress among employees of public sector banks. The findings of the study that role clarity in technology usage should be maintained, so that it does not add to the stress levels of the bank employees. Likewise, the negative effect of technology characteristics like usefulness, reliability and complexity can be reduced by introducing proper infrastructure and training facilities for the end-users. The work-life conflict can be resolved by adopting flexi-time working and other relaxation techniques for reducing technostress.

Saganuwan, Mohammed Umar (2015) "Conceptual Framework: AIS Technostress and Its Effect on Professionals' Job Outcomes" The purpose of this paper is to develop a conceptual framework that examines and provides a systematic understanding of the impact of accounting information system (AIS) information characteristics on technostress creators and its effect on professionals' job outcomes. The results of the literature review suggest ten propositions with

four AIS information characteristics, namely: scope, aggregation, timeliness and integration) and its relationship with technostress creators (techno-overload, techno-invasion, techno-uncertainty, techno-insecurity and techno-complexity) as the determinants and job satisfaction and task performance as the outcomes. The framework provides both researchers and practitioners the opportunity to further examine the effect of technostress on AIS usage.

R.K. Jena (2015) "Technostress in ICT enabled collaborative learning environment: An empirical study among Indian academician" This study analyzes the relationship between Technostress creators, Technostress Inhibitors and Technostress effect among Indian academician in collaborative teaching and learning environment using concepts of socio-technical theory and role. This research is conducted on 216 academicians in India through questionnaire based survey. The study found a strong relationship between Technostress creators, Technostress Inhibitors and Technostress effect.

NEED OF THE STUDY

Banking industry in India is adopting technology with a great pace, to cope up with increasing competition among domestic, foreign and private players the use of technology increases productivity and efficacy of employees, there for it is also necessary for providing banks services everywhere with every possible and innovative way. The use of technology is generating necessary evil technostress as we all know that technology is leading to increase work load and never ending emergence of work, which has affected work life balance of employees. In the reference comparison of technostress level of private and public sector banks will be a vital significance because availability of technology and its implementation is entirely different in both the sector banks.

Present situation is alarming situation for treating it immediately, otherwise chances are there of adverse impact of working of employees like decreased productivity, job insecurity, job satisfaction and commitment etc, that's why there is urgent need to work on this topic to find out appropriate and immediate solution of said problem.

SCOPE OF THE STUDY

Scope of the study is confined in terms of technostress of the perceptions of employees of State Bank of India, Union Bank of India, ICICI Bank and Axis Bank operating in Agra city. (*Banks are selected on the basis of IBA Banking Technology Awards 2014-15). The study will enable to arrive at the factors responsible for technostress associated with employees of Public Sector Banks and Private sector Banks.

OBJECTIVES OF THE STUDY

The main objective of the study is to identify different factors which induce technostress among employees and its impact on the employee's performance. The major objectives of the proposed study are:

1. To identify the factors which induce techno stress among employees of Selected Banks.
2. To analyze the stress level on the basis of demographic profile of employees.
3. To compare and analyses the impact of techno stress on employees performance of selected banks.
4. To suggest model for minimizing the effects of technostress in Banks.

RESEARCH METHODOLOGY

To achieve the objectives of the study, the following research methodology is proposed:

RESEARCH DESIGN ADOPTED

S.NO.	PARAMETERS	CUSTOMER SURVEY
1.	Research Design	Descriptive Survey
2.	Sampling Method	Non-probability Sampling Method
3.	Sample Size	200 employees
4.	Sample Element	Employees (front line managers and middle level manager)
5.	Sampling Area	Agra
6.	Research Approach	Websites, Books, Journals, Thesis, Newspaper, Published records etc.
7.	Research Instrument and Contact Method	Questionnaires filled through personal visit from individual employees and interview with banks officials.
8.	Sampling Unit	Public sector Indian Bank Private Sector Banks

9.	Data Collection	Primary and Secondary data
10.	Data Analysis	Descriptive & Inferential statistics

Sample Size and Selection Criteria-

200 bank employees will be interviewed through questionnaire from various branches of selected banks in Agra city. Bank employees comprise of front line managers (executives, POs, cashiers, accountants etc.) and middle level managers (Training managers, Branch managers etc.) Among the sample of 200 employees; 160 front line mangers and 40 middle level managers will be included for the study. The number of front line managers (executives, POs, cashiers, accountants etc.) taken in the study is large in comparison to the middle level (Training Managers, Branch Managers etc.) because the nature of their job profile is such that it leads to greater exposure to technology as compared to the latter case. Sample banks are selected on the basis of IBA (Indian Banks' Association) Banking Technology Awards 2014-15 reports. Following table shows the details of Sample Size:

TABLE: DETAILS OF SAMPLE SIZE

		Employees	
		Front line Managers	**Middle Line Managers**
Public Sector Banks	State Bank of India	40	10
	Union Bank of India	40	10
Private Sector Banks	ICICI Bank	40	10
	Axis Bank	40	10
	Total	**160**	**40**

DATA COLLECTION

To achieve the above stated objectives, both primary and secondary data will be used.

- **Primary Data**

For the collection of Primary data, a well-structured Questionnaire based on the selected factors from related literature will be constructed and executed to the banks employees (front line

managers and middle level manager) and interviews with bank officials will also be administered by the researcher in the different branches of selected banks operating in Agra city.

- **Secondary Data**

Secondary data will be collected from published reports of RBI, Different publications of RBI, Published Research Papers, Thesis, Journals and Articles, Newspapers, Magazines and Different Websites.

- **Research Instrument and Contact Method**

  A well-structured Questionnaire based on the selected factors from the related literature like Moore (2000), Kreiner (2006), Eddy.et.al (1999) etc. will be constructed and executed to the banks employees. The questionnaire will consist of information regarding personal information and the statements regarding technology created factors and stress based on past studies. Five point Likert scales will be used for ascertaining the relationship between technology created factors and stress. To check the validity and reliability of questionnaire, factor analysis and reliability analysis will be applied in order to identify the most contributing factor.

The researcher will use the following Specific Research Methodology:

S. No.	Objectives	Research Methodology	Statistical Tools
1.	To identify the factors which induce techno stress among employees of selected Banks.	For achieving this objective, the primary and secondary data will be used for framing well structured questionnaire based on review of past studies.	Factor Analysis and reliability analysis will be used for achieving this objective.
2.	To analyze the stress level on the basis of demographic profile of employees in both types of Banks.	Data for this objective will be achieved through primary source with specific tools.	Chi-Square and ANOVA test will be used for analysis the demographic profile of employees.
3.	To compare and analyses the impact of techno stress on employees performance of selected banks.	This objective will be fulfilled by primary and secondary sources.	T-test, correlation and regression analysis will be used for achieving this objective.

4.	To suggest model for minimizing the effects of technostress in Banks.	It would be the outcome of the entire research work.	Research Model will be framed on the basis of results achieved.

IMPLICATION OF THE STUDY

Due to high level of absorption of ICT tools in banking industry, the necessary evil technostress is increasing with every technological transformation. This is the alarming situation for its treatment immediately. Otherwise, it will effect working of employees adversely. The above said study can contribute to get into the details and solve the problems, if implemented. This may work as the base for the further researches in this area for instance maintenance of balance between technology and stress, etc. and improvement in the performance and productivity of employees as well.

PROPOSED CHAPTER PLAN OF THE STUDY:

Chapter – 1 Introduction

- Introduction of technostress
- Review of previous researches
- Need of the study
- Research methodology
- Limitations

Chapter – 2 Profile of selected banks

Chapter – 3 Identification of the factors for technostress and its effect on employees

Chapter – 4 Data Analysis and Interpretation

Chapter – 5 Development of model for minimizing the effect of stress on employees.

Chapter – 6 Findings, Conclusion and Suggestions

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Shweta Jain
Research Scholar

Prof. Shalini Dubey
Supervisor
Dept. of Applied Business Economics

Dr. Anisha Satsangi
Co-Supervisor
Dept. of Applied Business Economics

Prof. S.P. Kaushik
Head, Dept. of Applied Business Economics
Dean, Faculty of Commerce